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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/760,233

01/21/2004

Kia Silverbrook

MPA09US

2195

24011

7590

07/25/2006

SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, NSW 2041
AUSTRALIA

EXAMINER

MARTIN, LAURA E

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/760,233

Applicant(s)

SILVERBROOK ET AL.

Examiner

Laura E. Martin

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook (US 6439908) in view of Silverbrook et al. (US 2002/0140954).

As per claim 1, Silverbrook et al. ('908) teaches a printhead assembly comprising: at least two printhead modules (figure 15, element 10) each comprising a least two printhead integrated circuits (figure 2, element 18), each of which has nozzles formed therein (column 3, lines 44-50) for delivering printing fluid into the surface of print media, and a support member (figure 2, element 28) supporting and carrying the printing fluid for the at least two printhead integrated circuits (figure 2, element 18); and a casing (figure 2, element 14) in which at least two printhead modules are arranged so as to be removably mounted in linearly aligned relationship, wherein the assembly has an aggregate length (column 1, line 6) and a number of printhead modules (column 3, lines 1-6) predetermined to provide for selected pagewidth printing.

As per claim 2, Silverbrook et al. ('908) teaches a printhead assembly (figure 2, element 10) wherein each of the printhead modules has sixteen printhead integrated circuits (column 3, lines 49-50).

As per claim 3, Silverbrook et al. ('908) teaches a printhead assembly (figure 2, element 10) wherein the at least one printhead module (figure 2, element 12) is formed as a unitary arrangement of the at least two printhead integrated circuits (figure 2, element 18), the support member (figure 2, element 28), the electrical connector (column 3, line 59-65), and the at least one fluid distribution member (figure 7, element 30) mounting the at least two printhead integrated circuits to the support member; and the support member has at least one longitudinally extending channel (figure 8, element 72) for carrying the printhead fluid for the printhead integrated circuits and includes a plurality of apertures (figure 8, element 72) extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (column 4, lines 41-44).

As per claim 4, Silverbrook et al. ('908) teaches a printhead assembly (figure 2, element 10) wherein each printhead module of the at least two printhead modules has end portions which permit interconnection of the linearly aligned printhead modules and provide for fluid connection (figure 2, element 16) of the channels thereof (see figure 2).

As per claim 5, Silverbrook et al. ('908) teaches a printhead assembly (figure 2, element 10) wherein the end portions of each of the printhead modules comprise complementary female (figure 10, element 38) and male (figure 10, element 42) end portions.

As per claim 6, ('908) Silverbrook et al. teaches a printhead assembly (figure 2, element 10) further comprising a sealing adhesive (figure 1, element 84) provided at the interface of the interconnected printhead modules.

Silverbrook et al. ('908) does not teach the support members of the modules being configured to communicate said printing fluid with one another.

Silverbrook et al. ('954) teaches support members of the modules (figure 13, elements 15 and 16) being configured to communicate said printing fluid with one another (figure 13, element 11).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the printhead assembly of Silverbrook et al. ('908) with the disclosure of Silverbrook et al. ('954) in order to allow for easier printing.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook et al. (US 6439908) and Silverbrook et al. (US 20020140954), and further in view of Lu et al. (US 2003/0007042).

Silverbrook et al. ('908) teaches a sealing adhesive; however, it does not disclose the sealing adhesive being an epoxy.

Lu et al. discloses a sealing adhesive being epoxy [0002].


It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the printhead assembly of Silverbrook as modified et al. with that of Lu et al. in order to create a more durable apparatus with continuous ink flow.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura E. Martin


STEPHEN MEIER
SUPERVISORY PATENT EXAMINER